

PUBLISHED: 05-JUL-2018  
2015.0 DISCOVERY 4 / LR4 (LA), 303-01A

ENGINE - TDV6 3.0L DIESEL

# RIGHT VALVE COVER (G1254965)

REMOVAL AND INSTALLATION

<b>12.29.44</b>	<b>CAMSHAFT COVER - RIGHT - RENEW</b>	<b>3000 CC, TDV6</b>	<b>5.30</b>	<b>USED WITHINS</b>	
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SPECIAL TOOL(S)



E54135

**100-012**

Slide Hammer



E116924

**310-213**

Fuel Injector Removal Adapter



E124125

**JLR-310-237**

Remover, Fuel Injector

## PART(S)

STEP	PART NAME	QUANTITY
Installation Step 1	Camshaft cover gasket	1
Installation Step 8	Fuel Injector replacement kits	3

## REMOVAL



### NOTES:

- This procedure contains some variation in the illustrations depending on the vehicle specification, but the essential information is always correct.
- This procedure contains illustrations showing certain components removed to provide extra clarity.

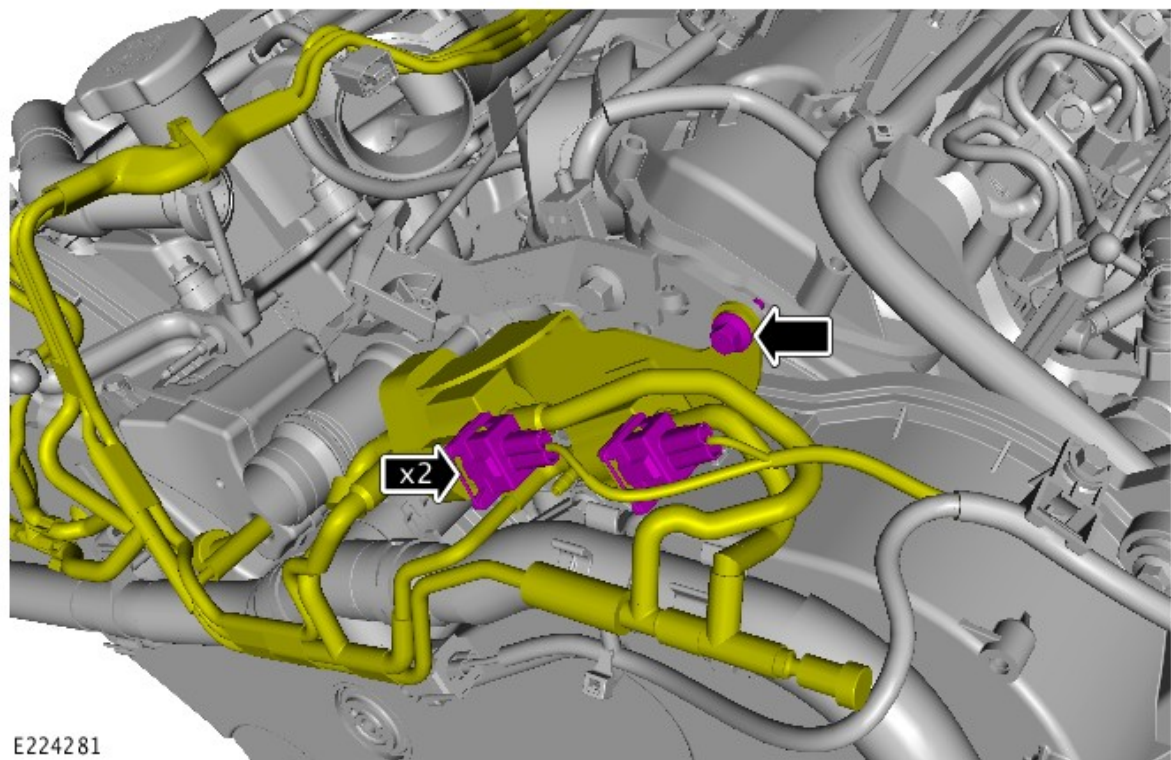
1. Disconnect the startup battery ground cable.  
Refer to: [Specifications](#) (414-01 Battery, Mounting and Cables, Specifications).

2. Raise and support the vehicle on a suitable 2 post lift.  
Refer to: [Lifting](#) (100-02 Jacking and Lifting, Description and Operation).

3. Partially drain the cooling system.  
Refer to: [Cooling System Partial Draining and Vacuum Filling](#) (303-03A, General Procedures).

4. Remove the throttle body.  
Refer to: [Intake Air Shutoff Throttle](#) (303-04A Fuel Charging and Controls - TDV6 3.0L Diesel, Removal and Installation).

5.

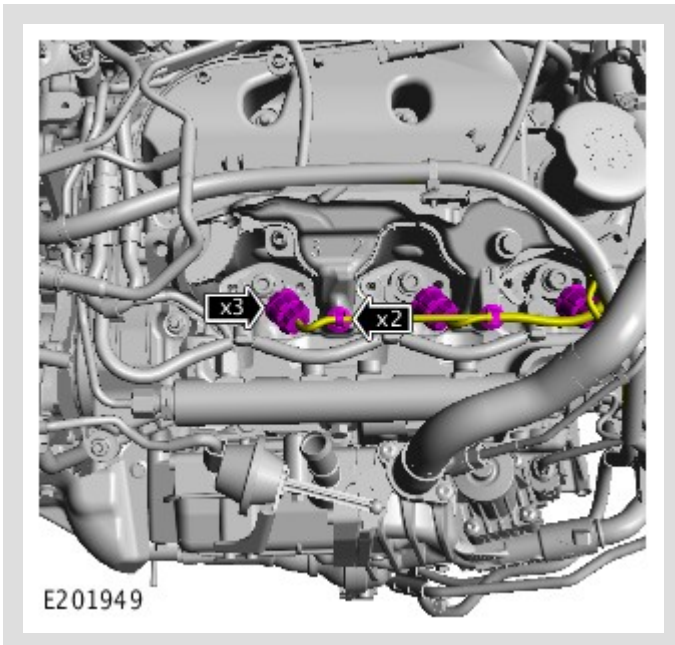


- Disconnect the 2 electrical connectors.
- Release the vacuum harness and position aside.

6. Always follow the cleaning process before doing any repairs to the fuel injection system components. Failure to follow this instruction may result in damage to the fuel injection system. Refer to: [Fuel Injection Component Cleaning](#) (303-04A Fuel Charging and Controls - TDV6 3.0L Diesel, General Procedures).

7. Remove the right fuel rail. Refer to: [Right Fuel Rail](#) (303-04A Fuel Charging and Controls - TDV6 3.0L Diesel, Removal and Installation).

8.

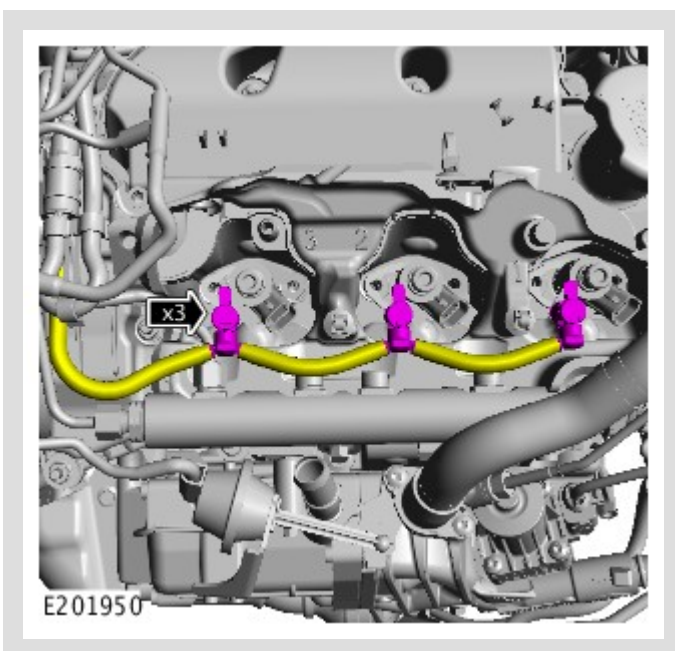


Disconnect and release the fuel injector wiring harness.

9.

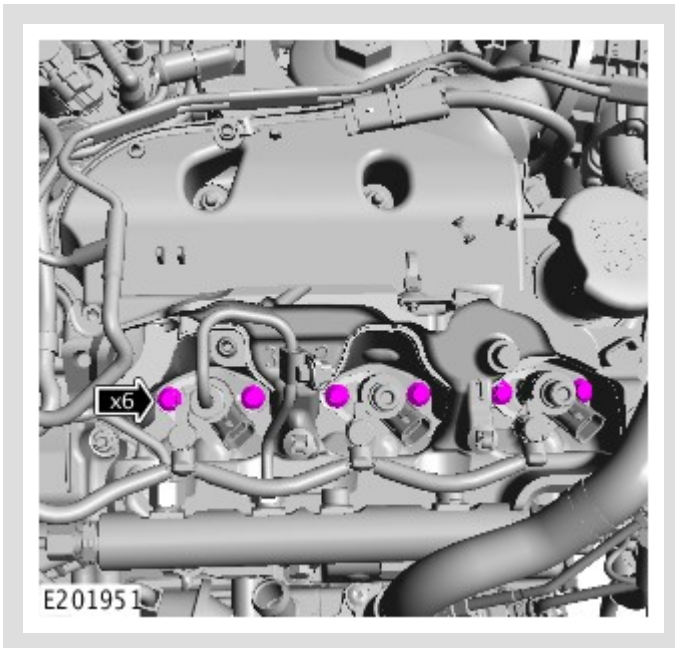
**⚠ CAUTION:**

Be prepared to collect escaping fuel.



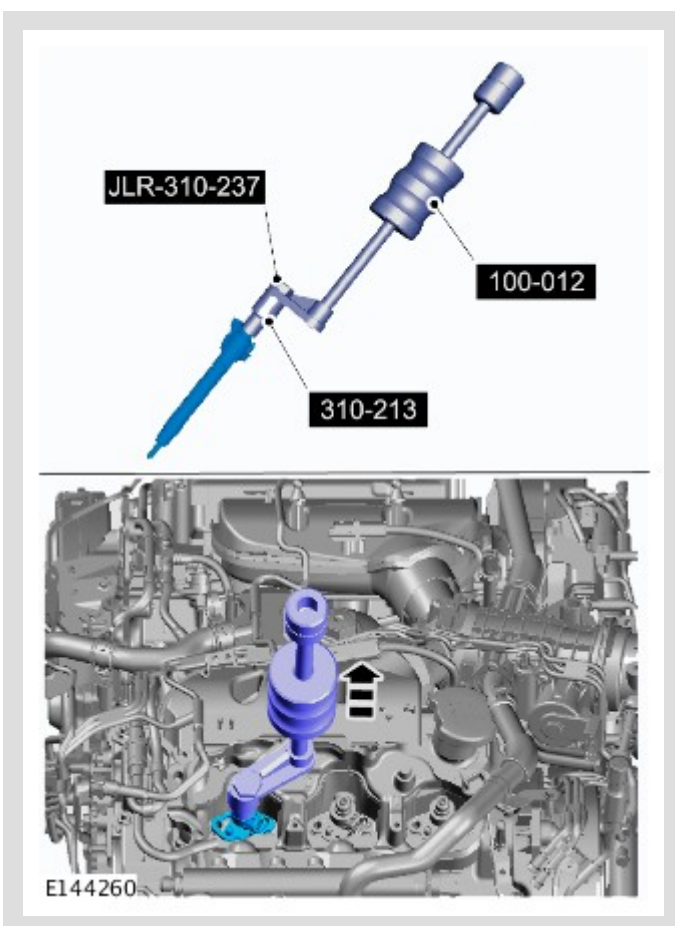
Release the fuel injector leak off pipes from the injectors.

10.



Remove the fuel injector bolts.

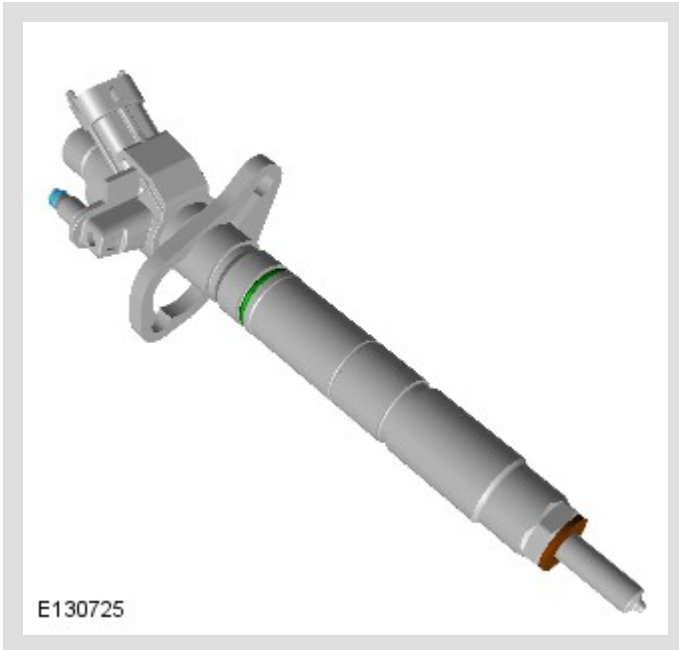
11.



Using the special tools remove the fuel injector.

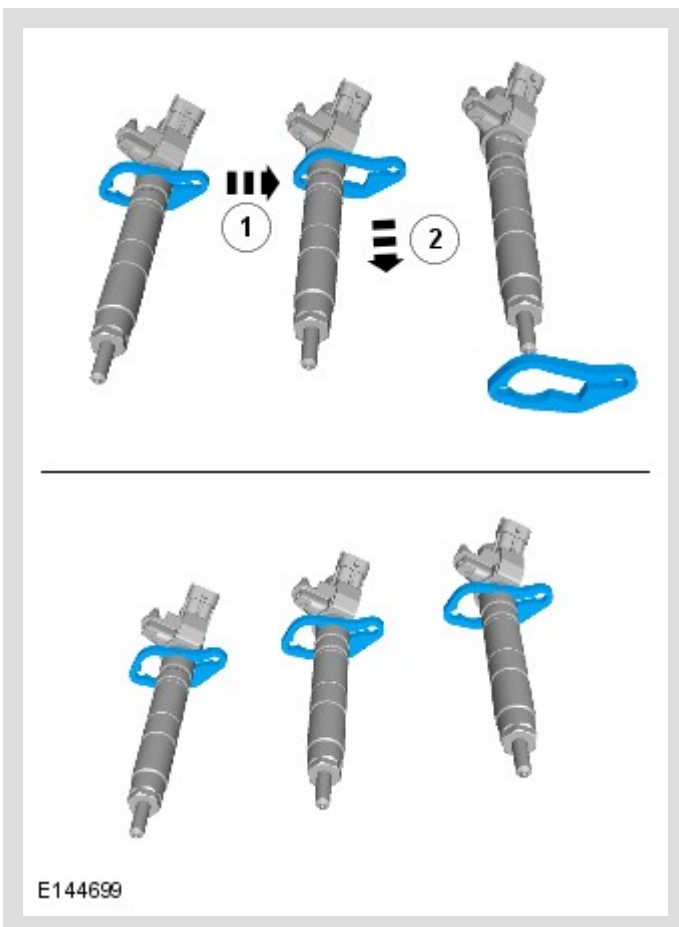
*Special Tool(s):* [100-012](#), [310-213](#), [JLR-310-237](#)

12.



- Remove and discard the O-ring seal.
- Remove and discard the sealing washer.

13.



Remove and discard the fuel injector retaining clamp.

14. Repeat steps 11 to 13 for the remaining 2 fuel injectors.

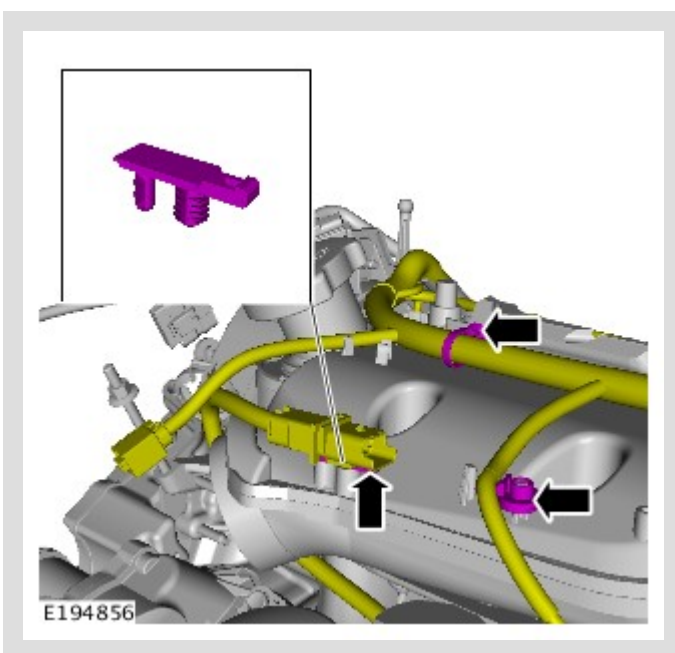


15.



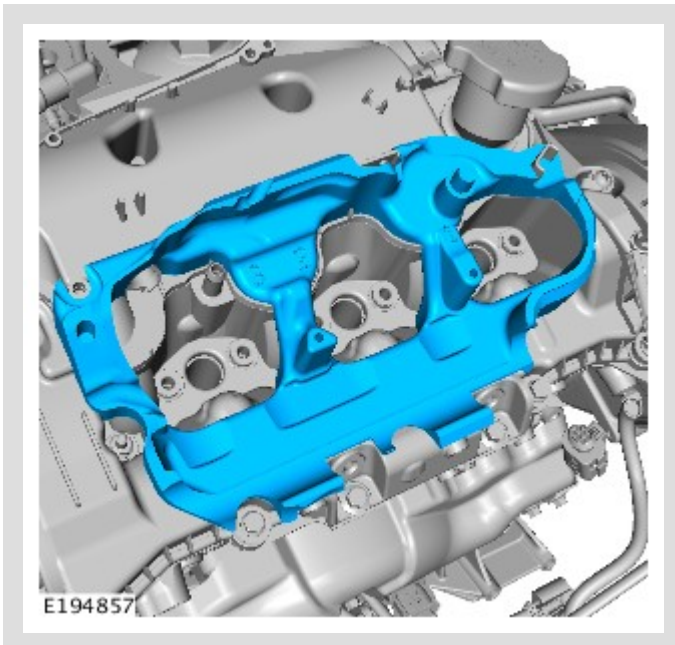
Release the vacuum harness.

16.



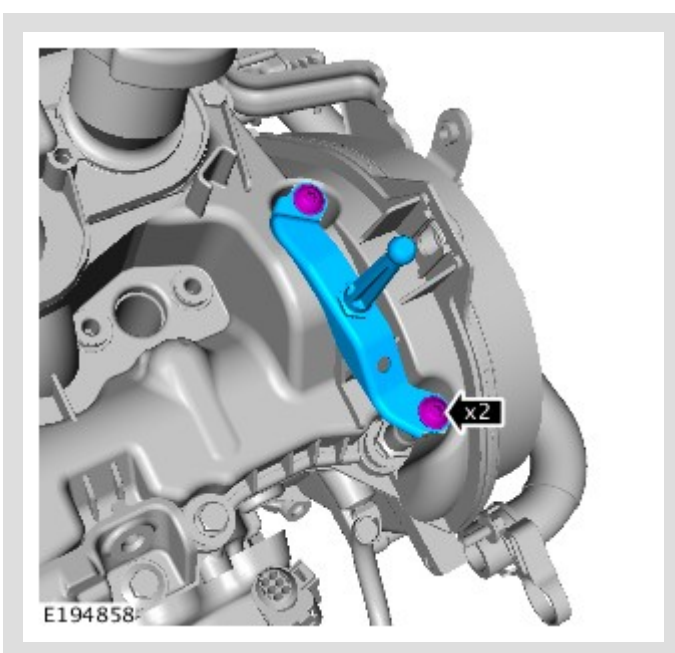
Release the wiring harness.

17.



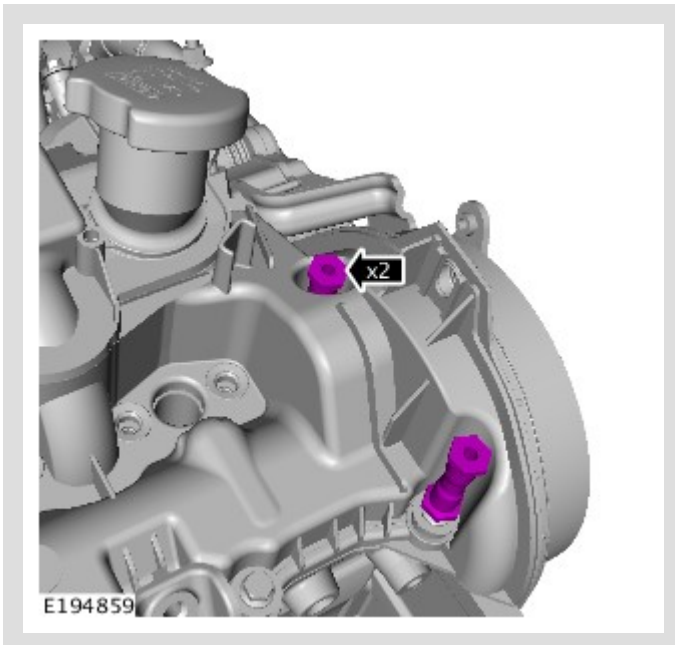
Remove the Noise, Vibration and Harshness material.

18.



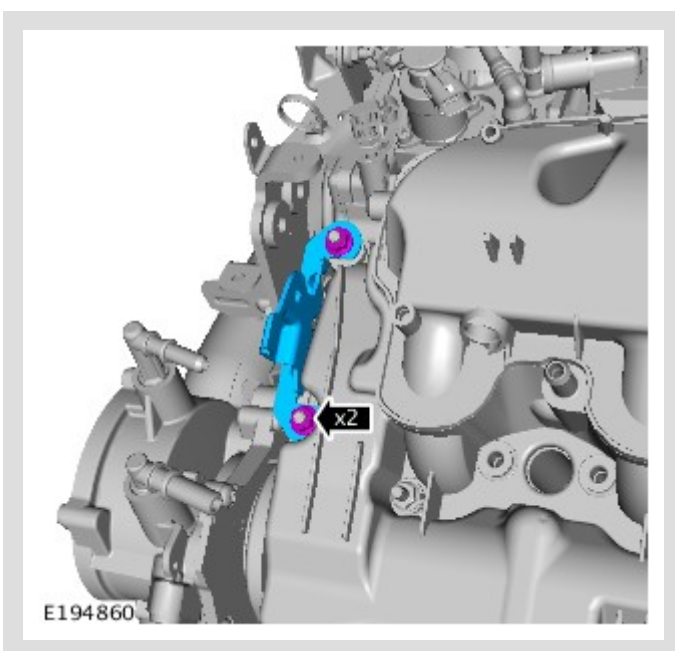
Remove the pin.

19.



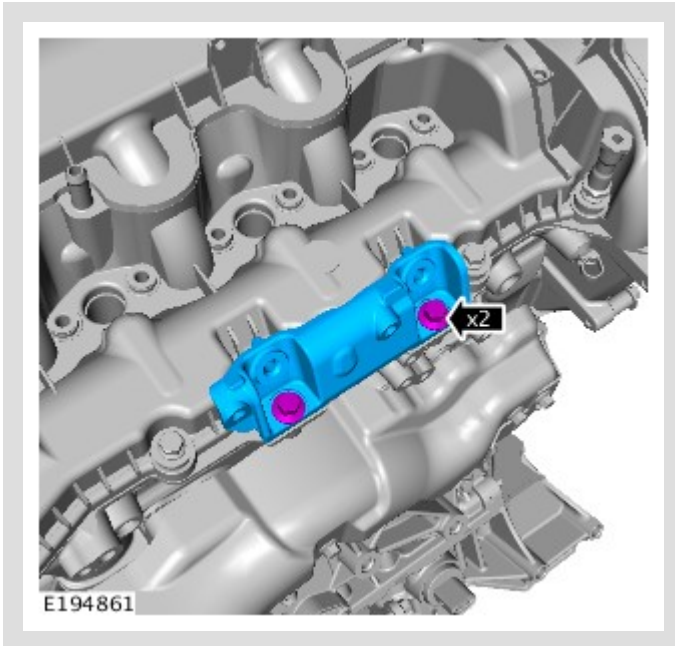
Remove the plastic fixings.

20.



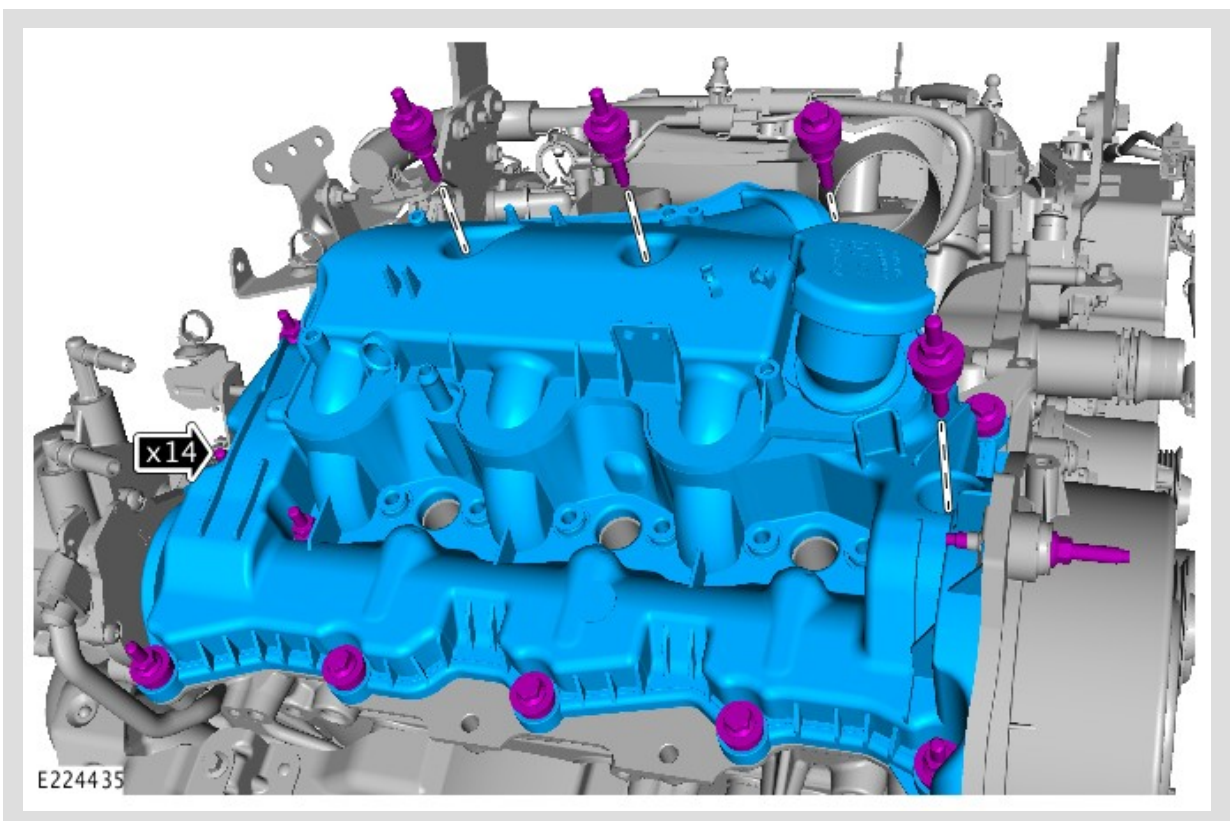
Remove the right valve cover mounting bracket.

21.



Remove the fuel rail mounting bracket.

22.



- Loosen the 14 left valve cover bolts.
- Remove the right valve cover.
- Remove and discard the right valve cover gasket.

## INSTALLATION

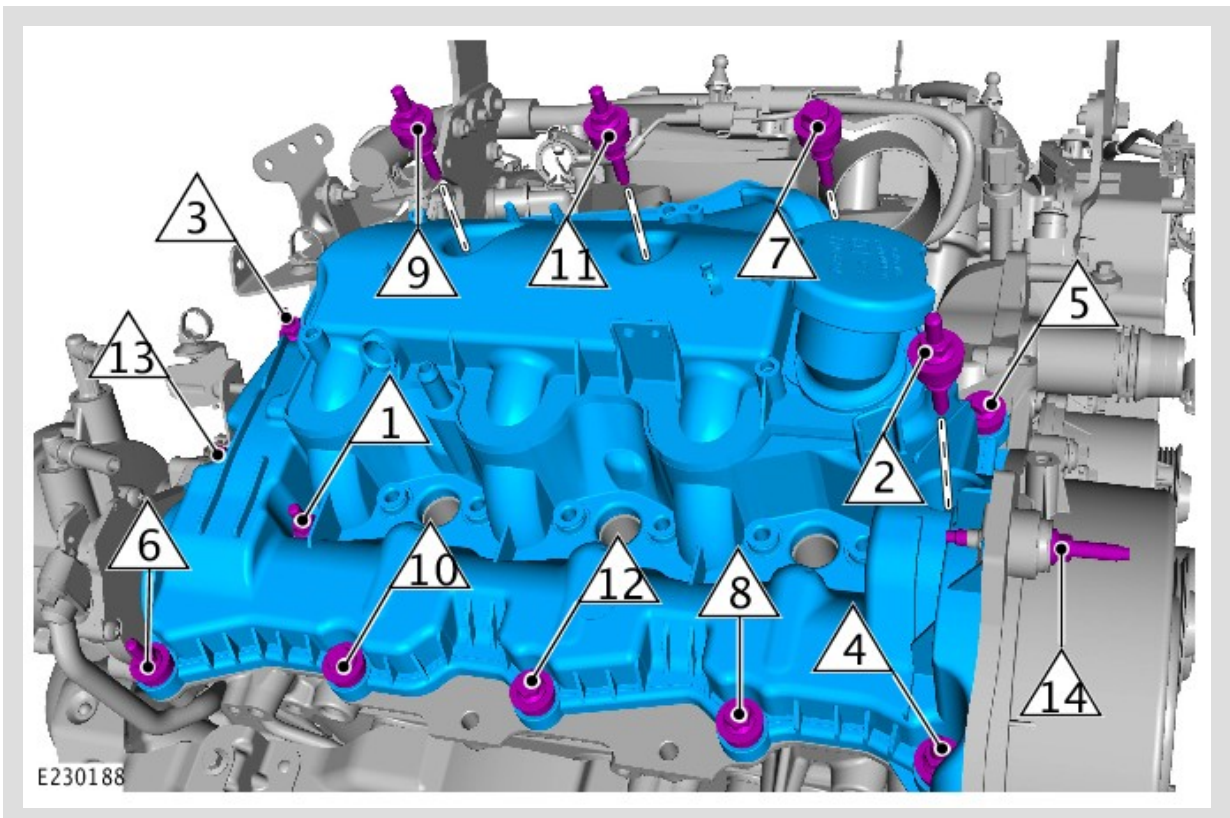
1.

### ⚠ CAUTION:

Make sure that the mating faces are clean and free of corrosion and foreign material.

- Install a new left valve cover gasket  
*Renew Part: [Camshaft cover gasket](#) Quantity: 1.*
- Install, but do not fully tighten the 14 left valve cover bolts.

2.



- Tighten the 14 left valve cover bolts in the indicated sequence.  
*Torque: 10Nm*

3. Install the fuel rail mounting bracket.

*Torque: 23Nm*

4. Install the right valve cover mounting bracket.

*Torque: 10Nm*

5. Install the plastic fixings.

6. Install the pin.

*Torque: 9Nm*

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- 7.
- Install the Noise, Vibration and Harshness material.
  - Install the wiring harness to the right valve cover.
  - Install the vacuum harness.

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- 8.
- Install new fuel injector retaining clamps.
  - Install new O-ring seals.
  - Install new sealing washers.
- Renew Part: [Fuel Injector replacement kits](#) Quantity: 3.*

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9. Install the fuel injectors.
- Torque: 9Nm*

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- 10.
- Install the fuel injector leak off pipes.
  - Connect the fuel injector wiring harness.

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11. Install the right fuel rail.
- Refer to: [Right Fuel Rail](#) (303-04A Fuel Charging and Controls - TDV6 3.0L Diesel, Removal and Installation).

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- 12.
- Install the vacuum harness.
  - Connect the electrical connectors.

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13. Install the throttle body.
- Refer to: [Intake Air Shutoff Throttle](#) (303-04A Fuel Charging and Controls - TDV6 3.0L Diesel, Removal and Installation).

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14. Fill the drain the cooling system.
- Refer to: [Cooling System Partial Draining and Vacuum Filling](#) (303-03A, General Procedures).

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15. Connect the startup battery ground cable
- Refer to: [Specifications](#) (414-01 Battery, Mounting and Cables, Specifications).